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10/561,408	12/16/2005	Takashi Kikukawa	890050.534USPC	1093

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SEED INTELLECTUAL PROPERTY LAW GROUP PLLC

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SEATTLE, WA 98104

EXAMINER

MULVANEY, ELIZABETH EVANS

ART UNIT

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1794

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/561,408

**Applicant(s)**

KIKUKAWA ET AL.

**Examiner**

Elizabeth E. Mulvaney

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/DE)  
Paper No(s)/Mail Date 8/8/08, 6/6/08, 3/21/08, 3/6/08, 12/15/06, 12/16/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_



**DETAILED ACTION**  
***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,896,946.

The reference discloses a recording medium comprising a dielectric layer, a noble metal oxide layer, a dielectric layer, phase change material layer (light absorption layer), a dielectric layer, and a reflective layer which are sandwiched between a substrate and a resin protective layer. The thicknesses of the dielectric, noble metal oxide and reflective layers are all within the claimed ranges. See claims 1-9. It is recognized that the reference is silent as to the thickness of either the substrate or resin protective layer. However, varying the thickness of these layers is a well-known practice in the art as the thickness is directly proportional to protective properties of these layers.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,166,346 in view of US 6,896,946.

The reference discloses a recording medium comprising a dielectric layer, a noble metal oxide layer, a dielectric layer, phase change material layer (light absorption layer), a dielectric layer, and a reflective layer which are stacked on a substrate. The thicknesses of the dielectric, noble metal oxide and reflective layers are all within the claimed ranges. The reference does not specify a light-transmitting layer formed on the upper dielectric layer. However, the '946 reference shows that it is known to provide a resin protective layer on the surface of a super-resolution medium. Therefore, it

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would have been obvious to one of ordinary skill in the art to provide a resin layer on the outer surface of the '346 medium. One would reasonably expect to achieve the protective properties disclosed.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 7,132,148. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 10/561,090. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/561,096. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 10/565,351. Although the conflicting claims are not identical, they are not patentably distinct from each other

because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/563,012. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/570,659. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims

do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/568,582. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/562,901. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.



This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3,6,8,10,12 of copending Application No. 10/581,633. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/568,586. Although the conflicting claims are not identical, they are not patentably distinct from each other because they cover the same recording medium comprising a substrate, a noble metal oxide having dielectric layers on either side thereof, and a light-transmitting layer. It is recognized that the claims do not specify the thickness of the layers or include the light absorption layer and reflective layers. However, when looking to the specification to further define the claims, these limitations are found.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth E. Mulvaney whose telephone number is 571-272-1527. The examiner can normally be reached on Monday-Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth E. Mulvaney/

Primary Examiner, Art Unit 1794